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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,226	01/04/2000	GEORGE HSU	P413	8873

24739 7590 05/26/2004

CENTRAL COAST PATENT AGENCY
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EXAMINER

DINH, DUNG C

ART UNIT PAPER NUMBER

2153

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

3

Office Action Summary

Application No.

09/477,226

Applicant(s)

HSU, GEORGE

Examiner

Dung Dinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee per 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee per 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/24/04 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections per this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as per section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horbal et al. (US 6,112,246) in view of Brown et al. (US 6,480,896) and Perkins (US 5,159,592).

As per claim 14, Horbal discloses a method for managing functions for a plurality of appliances in a home or business,

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the appliances connected to control units: (a) identifying each control unit uniquely electronically; see col.15 lines 59-65; (c) downloading control individual step sequence from an Internet site by the base station identified for individual ones of the control units, and transmitting the downloaded step sequences selectively to the individual ones of the control units; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59; see col. 3, lines 31-45). Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction, also Horbal can download information from various device servers for usage by the clients; see col. 17, lines 25-41, and access by the microservers to the respective information related to the device and found on the device's server; see col. 15, line 2-col. 17, line 14, as well as having a central administrator to control multiple devices; see col. 17, lines 10-25, also see figs. 1 and 2.

Horbal does not specifically disclose the microcontroller stored step sequence received from the remote server and generates outputs to operate functions of the appliance according to the stored step sequence. In similar field of invention, Brown teaches motion data (step sequence) is receive

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from a host machine over a network and stored in a controller such that the controller can generate signals for directly operate a target device [see col.1 lines 20-42, col.4 lines 23-29, col.11 lines 39-52, col.13 lines 49-62]. Hence, it would have been obvious for one of ordinary skill in the art to combine the teaching of Brown with Horbal to download and store step sequence (motion data) in the controller because it would have enable thy system to efficiently upgrade/change the operation of the target device. It is apparent the microserver of Horbal's system as modified would operate to generate output signals to control the appliance connected to it according to the stored motion data.

Horbal does not disclose a system adding control unit via wireless communication within range to a base station. Networking via a wireless communication is well known in the art. Perkins discloses a system for enabling wireless devices to communicate with wired network via a based station (local gateway); see abstract, col.3 lines 16-37. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have used wireless network with the system of Horbal, such as taught by Perkins, because it would have reduced electrical wirings for communication with the control units.

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It is well known in the networking art to register and assign an address to a new node added to the network. Horbal teaches auto-discovery and maintain a list of all devices (col.17 lines 2-15) such that the new devices may be monitored through the web site. Horbal teaches automatically assign an IP address to a new control unit (col.14 lines 23-25). Perkins teaches registering and assigning an address to a wireless control unit that is within range of a base station (gateway). See Perkins col.5 lines 50-65. Hence, it have been obvious for one of ordinary skill in the art in implementing Horbal system as modified to assign address and register the new control unit when it is brought in range of the base station because it would have enabled automatic discovery and configuration of added device.

As per claim 15, it is apparent status data from the control units would be forwarded by the base station to the Internet site in order for the user to view the data on his browser.

As per claim 16, Horbal discloses the communication port is one of a standard serial or parallel communication port compatible with a personal computer (PC) and wherein a connected PC handles communication with the Internet for receiving the

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step sequences, and transfers the step sequences to the base station; see figs. 2-5.

As per claim 17, Horbal discloses a control system for systems and appliances in a home or business area, comprising: a plurality of control units, individual ones of the units wired to sensors and actuators of individual ones of the appliances, the control units having each a microcontroller, a system memory, an I/O section; and an Internet site executing software enabling a subscriber associated with the home or business area to interact with the base station; characterized in that the Internet site software provides an interface for their subscriber to review status of systems and appliances having connected control units in the associated home or business, and to author step sequences addressed for individual ones of the control units in the home or business; see col. 8, lines 26-319, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45. Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction, also Horbal can download information from various device servers for usage by the clients; see col. 17, lines 25-41, and access by the microservers to the respective information related to the device

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and found on the device's server; see col. 15, line 2-col. 17, line 14, as well as having a central administrator to control multiple devices; see col. 17, lines 10-25, also see figs. I and 2.

Horbal does not specifically disclose a stored downloaded step sequences to the microcontroller and the microcontroller generates outputs to operate functions of the appliance according to the stored step sequence. In similar field of invention, Brown teaches motion data (step sequence) is receive from a host machine over a network and stored in a controller such that the controller can generate signals for directly operate a target device [see col.1 lines 20-42, col.4 lines 23-29, col.11 lines 39-52, col.13 lines 49-62]. Hence, it would have been obvious for one of ordinary skill in the art to combine the teaching of Brown with Horbal to download and store step sequence (motion data) in the controller because it would have enable thy system to efficiently upgrade/change the operation of the target device. It is apparent the microserver of Horbal's system as modified would operate to generate output signals to control the appliance connected to it according to the stored motion data.

Horbal does not disclose a system adding control unit via wireless communication within range to a base station.

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Networking via a wireless communication is well known in the art. Perkins discloses a system for enabling wireless devices to communicate with wired network via a based station (local gateway); see abstract, col.3 lines 16-37. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have used wireless network with the system of Horbal, such as taught by Perkins, because it would have reduced electrical wirings for communication with the control units.

It is well known in the networking art to register and assign an address to a new node added to the network. Horbal teaches auto-discovery and maintain a list of all devices (col.17 lines 2-15) such that the new devices may be monitored through the web site. Horbal teaches automatically assign an IP address to a new control unit (col.14 lines 23-25). Perkins teaches registering and assigning an address to a wireless control unit that is within range of a base station (gateway). See Perkins col.5 lines 50-65. Hence, it have been obvious for one of ordinary skill in the art in implementing Horbal system as modified to assign address and register the new control unit when it is brought in range of the base station because it would have enabled automatic discovery and configuration of added device.

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As per claim 18, Horbal discloses a control system wherein the base station comprises an Internet browser and an Internet-capable port for Internet access; see fig. 2.

As per claim 19, Horbal discloses a control system wherein the base station has a standard serial or parallel port for connection to a personal computer, and the personal computer accomplishes necessary Internet browsing functions; see fig. 6-12.

As per claim 20, Horbal discloses a control system wherein each control unit is configured to the base station by a specific address; see fig. 2, each appliance.

As per claim 21, Horbal discloses a control system wherein the subscriber has a specific web page on the Internet site, wherein all configured, installed and active control units in the home or business area with which the subscriber is associated are indicated; see figs. 6-12.

As per claim 23, Horbal does not disclose communication with the control units using magnetic induction equipment. The type of equipment used for communication with the control units clearly would have been a matter of design choice. It would have been obvious for one of ordinary skill in the art to use magnetic induction because it would have enabled control units to be added without making electrical connections or wiring to

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the base unit. As per the limitation of assigning address and making the detail of the new control unit available such that it can be control through the web site, the obviousness rationale is the same as that for the assignment of address in the wireless communication stated in claim 17.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 2100 Customer Service whose telephone number is (703) 306-5631.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to: (703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA, Fourth Floor (Receptionist).



Dung Dinh
Primary Examiner
May 24, 2004